

# Work Order ID 93068

November-14-12 1:35:59 PM

**\*93068\***

Page 1

Item ID: D4654-3

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: O-Ring

Stop **\*NS2\***

Start Date: 14/11/2012 Start Qty: <sup>100</sup>24.00

**\*24\***

Cust Item ID:

Required Date: 05/12/2012 Req'd Qty: 24.00

**\*24\***

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12-11-14 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D4654	A
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100

0.00

**\*100\***

Purchasing

Memo

0.00

Purchasing

Issue P/O: 18438

Purchase Part Number: 320-017

Supplier: Spearur

Certificate of conformity is required

*CA 12/11/14 100*

110

Receive & Inspect for Damage & Mat'l Certs

0.00

**\*110\***

Packaging

Memo

0.00

Packaging

*42/11/20 (100)*

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>						
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>			
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Material <input type="checkbox"/>												
Setup <input type="checkbox"/>												
Other <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
Unapproved <input type="checkbox"/>												
<b>FAULT CATEGORY</b>												
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other	

# Work Order ID 93068

November-14-12 1:36:00 PM

\*93068\*

Page 2

Item ID: D4654-3

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: O-Ring

Start Date: 14/11/2012 Start Qty: 24.00

\*24\*

Cust Item ID:

Required Date: 05/12/2012 Req'd Qty: 24.00

\*24\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC6- Inspect dimensions to drawing

0.00

\*120\*

QC

Memo

0.00

Quality Control

DAS  
15  
9-89  
12/11/26

DAS  
16  
9-89  
12/11/27

100

130

Identify as per dwg & Stock Location: 117

0.00

\*130\*

Packaging

Memo

0.00

Packaging

12/11/27 (100)

140

QC21- Final Inspection - Work Order Release

0.00

\*140\*

QC

Memo

0.00

Quality Control

12/11/28

12-11-27

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
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Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other	

# Picklist Print

November-14-12 1:36:04 PM

Page 1

Work Order ID: 93068

\*93068\*

Parent Item: D4654-3

\*D4654-3\*

Parent Item Name: O-Ring

Start Date: 14/11/2012

Required Date: 05/12/2012

Start Qty: 24.00

Required Qty: 24.00

Comments: IPP REV:A NEW ISSUE 12--10-05 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
320-017		Purchased	No			110	Each	0.0000	1	24			
*320-017*									**				
O-Ring													

12/11/12 100

NCR: Yes / No

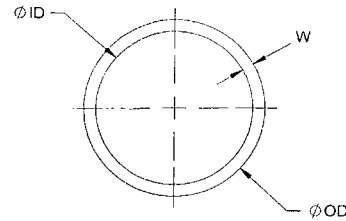
**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	<b>Date</b>	<b>Step</b>	<b>Qty</b>	<b>Description of work order update or Non-conformance</b>	<b>Initial Chief Eng</b>	<b>Action Description</b>	<b>Sign &amp; Date</b>	<b>Verification</b>	<b>QC Inspector</b>		
Doc/Data <input type="checkbox"/>											
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# SPECIFICATION CONTROL DRAWING



SHORE A  
REL. TO  
ENGIN. DES.  
UNCONTROLLED COPY  
SUBJECT TO REVISION  
WITHIN 100000  
WORK ORDER  
NO 93068 MLC  
12-11-14

## D4654-X O-RING

DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	MATERIAL	DUROMETER	ID	OD	W	COLOUR	WEIGHT (lbs)
D4654-1	O-RING	SPAENAU	320-016	NITRILE (BUNA N)	75 SHORE A	0.614	0.750	0.070	BLACK	0.001
D4654-3	O-RING	SPAENAU	320-017	NITRILE (BUNA N)	75 SHORE A	0.676	0.816	0.070	BLACK	0.001

RELEASED  
2012-11-05

### NOTES:

- 1) MATERIAL: PER TABLE
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: PER TABLE

A	NEW ISSUE	MB	12.07.25
REV.	DESCRIPTION	BY	DATE
DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	MB		
CHECKED	✓	DRAWING NO.	REV. A
MFG. APPR.	✓	D4654	SHEET 1 OF 1
APPROVED	✓	TITLE	SCALE
DE APPR.	✓	O-RING	NTS
DATE	12.07.25	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO18438**

Purchase Order Date 11/16/12

PO Print Date 11/16/12

Page Number 1 of 3

**Order From :**

VC-HAS001

HASKINS INDUSTRIAL  
5-52 ANTARES DRIVE  
NEPEAN, ON K2E 7Z1  
CA

**Contact Name**

**Vendor Phone** 613 723 8800

**Vendor Fax** 613 723 8806

**Vendor Account Nbr**

**Buyer**

Chantal Lavoie

**Requisition Nbr**

**Tax Resale Nbr**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

**Ship To :**

DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FAKED**  
*02/11/12*

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D3672-3P	WASHER	11/22/12 Yes	500.00 Each	Dicom	\$0.3229	\$161.45
		Special Inst:	AS PER DWG D3672 REV. C B93316				
2	658-065	Washer	11/22/12 Yes	200.00 Each	Dicom	\$0.2600	\$52.00
		Special Inst:	AS PER DWG D3904 REV. B B93237				
3	320-017 <i>JMB</i>	O-Ring	11/22/12 Yes	100.00 Each	Dicom	\$0.4828	\$48.28
		Special Inst:	AS PER DWG D4654 REV. A B93068				
4	245-131	Nylon Plug	11/22/12 Yes	100.00 Each	Dicom	\$0.0796	\$7.96

No substitution or deviation without  
consent.

Certificate of Conformity or Material  
Certification required - YES NO

Change Nbr: 1

Change Date: 11/16/12



HASKINS INDUSTRIAL INC.  
5-52 ANTARES DRIVE

\*\* PACKING SLIP \*\*

Order # 1247073.00

NEPEAN, ONTARIO K2E 7Z1

Order Date 11/19/12

TEL (613)723-8800 FAX (613)723-8806

Page 1 of 2

Sold To: DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY  
ON  
K6A 1K7

Ship To: DART AEROSPACE LTD.  
1270 ABERDEEN STREET  
HAWKESBURY  
ON  
K6A 1K7

\* Reprint \*

Cust Phone #

Warehouse  
OTTAWA

F.O.B.  
DEST

Taken By  
Sylvie 613-723-880

Cust #	Customer P/O #	Required	Orig Order	Slsm	Ship Via	Terms
05168	18438	11/20/12	1247073.00	PL	DICOM	NET 30

Ln#	Bin #	Order UM	Ship	B/O	Product	Description
1	CAB110	3 EA	3		DB-110-0500-401	CARBIDE END MILL 1/2 4FL FLAT BOTT
2		1 EA	1		KE01X1 1152723	E05K SCLP18 CARBIDE BAR
3		200 C	200		SP1X100	658-0656 #10 FLAT WASHER
4		100 C	100		SP1X100	245-131 WHOLE PLUG
5		100 C	100		SP1X100	320-017 O-RING
6 *		1 EA	0	1	ST1X1	818 #53048 CENTER PUNCH
7		3 EA	3		PTD1X1 0633298	A921 Y DRILL
8		5 EA	5		PTD1X1 0633069	A921 17/64 DRILL
9		2 EA	2		PTD1X1 0633342	A921 7/16 DRILL
10		8 EA	8		PTD1X1 0212578	A921 #32 DRILL
11		100 C	100		SP1X100	HC-78 HEX HEAD S/C